

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-2, 4-9, 11-18, 20-21, and 23-29 are pending, with claims 1, 4, 5, 8, 11, 12, 16, 18, 20, 21, 23, 24 and 28 amended, and claims 3, 10, 19, 22 and 30-31 cancelled without prejudice or disclaimer by the present amendment. Claims 1, 8, 18, and 21 are independent.

In the Official Action, claims 1-3, 5, 8-11, 17-19, 21-23 and 29-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Oliver (U.S. Patent No. 6,455,840); claims 6, 7 and 30 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Oliver in view of Gordon (U.S. Patent No. 6,995,748); and claims 4, 12-16, 20 and 24-28 were indicated as containing allowable subject matter.

Applicant acknowledges with appreciation the indication of allowable subject matter.

Claims 1, 8, 18, and 21 are amended to recite the features of now-cancelled dependent claims 3, 10, 19, and 22. Allowable claims 4 and 20 are amended into independent form. No new matter is added. Also, the present amendment does not raise a new issue. Thus, should another rejection be issued based upon newly applied references, such a rejection should be non-final.

Briefly recapitulating, amended claim 1 is directed to

A computer input device, comprising:

an electronic imager positioned to create images of portions of a surface moving relative to the imager;

an illumination source positioned to illuminate the portions of the surface imaged by the imager; and

at least one controller coupled to the imager and the illumination source and configured to:

selectively activate the illumination source,

receive the images from the imager,

determine, based on at least some of the images, an imager velocity and *an imager acceleration* relative to the surface,

activate the illumination source at one of at least three activation rates when the imager is moving relative to the surface and imager velocity is being determined, and

select one of the at least three activation rates *based on* the imager velocity and *the imager acceleration*.

Amended independent claims 8, 18, and 21 also recite features relating to the determination of imager acceleration.

Oliver describes a method and device for illuminating a surface with pulses of light occurring at a selected rate; determining a velocity from the tracked movement; increasing the selected rate in response to increases in the determined velocity; and decreasing the selected rate in response to decreases in the determined velocity. However, the increased/decreased rates of Oliver are not based on determined acceleration values.

Oliver describes that the technique shown in FIGS. 5 and 6 is based on the knowledge that there is an upper limit on acceleration that can be expected, as well as on the permitted relative velocity between the navigation circuit and the surface. This knowledge can be used to reduce the sampling rate when the relative velocity is low, or zero. Oliver describes one method of accomplishing the variable rate sampling is to repeatedly compute a sampling rate based upon relative velocity and the associated parameter of system behavior, such as *maximum allowed acceleration* and maximum allowed velocity, all considered in light of the amount of apparent motion allowed between a reference frame and a data frame (that is, the amount of shifting that can be accommodated therebetween).

However, contrary to the Official Action relative to dependent claims 3, 10, 19, and 22, Oliver does not disclose or suggest determining an acceleration. On the contrary, Oliver merely assumes a maximum allowed acceleration when performing various calculations. When Oliver computes increases or decreases in pulse rate, these changes are only based on a measured velocity and (in some cases) an assumed, not measured, acceleration.

MPEP § 2131 notes that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also MPEP § 2131.02. “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Because Oliver does not disclose or suggest all of the features recited in claims 1, 8, 18, and 21, Oliver does not anticipate the invention recited in claims 1, 8, 18, and 21, and all claims depending therefrom.

Turning to dependent claims 5 and 17, contrary to the Official Action, Oliver does not disclose or suggest Applicant’s claimed “at least one user profile parameter.” The cited passage of Oliver only recites the use of look-up tables to expedite calculations. Nothing in the look-up tables of Oliver relate to user profile parameters. Because the cited passage of Oliver, as well as the remainder of Oliver, fails to disclose the use of user profiles, Applicant surmises that the rejection is based upon an unstated finding of inherency. However, the Official Action provides no rationale for any finding of inherency. Because the Official Action provides no explanation of why Applicant’s claimed features are inherent, Applicant submits the rejection is improper.¹

Furthermore, any rejection based on inherency would be improper because it is not possible to show “that the alleged inherent characteristic necessarily flows from the teachings of the applied prior art”² “The fact that a certain result may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic.”³ “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary

¹ MPEP § 2112, IV “Examiner must provide rationale or evidence tending to show inherency.”

² See MPEP 2112 (emphasis in original) (citation omitted). See also same section stating that “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic,” (emphasis in original). See also *In re Robertson*, 49 USPQ2d 1949, 1951 (Fed. Cir. 1999) (“[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill,’” citing *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991); and “[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient,” *Id.* at 1269 (citation omitted)).

³ *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1995, 1957 (Fed. Cir. 1993).

skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”⁴ Here, the look-up tables may be factory generated settings based on the partitioned range of allowable velocities. Thus, it is not inherent that the look-up tables are related in any fashion to user profile parameters.

Applicant has considered Gordon and submits Gordon does not cure the deficiencies of Oliver. Indeed, the flow chart of Fig. 4 of Gordon only shows calculations based on velocity, without reference to measured acceleration values. As none of the cited art, individually or in combination, discloses or suggests at least the above-noted features of independent claims 1, 8, 18, and 21, Applicant submits the inventions defined by claims 1, 8, 18, and 21, and all claims depending therefrom, are not rendered obvious by the asserted references for at least the reasons stated above.⁵

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael K. Mutter, Reg. No. 29,680 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

⁴ *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).
MPEP § 2142 “...the prior art reference (or references when combined) must teach or suggest all the claim limitations.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

By 

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